Attachment 1I

Nacimiento Water Project Effect on Basin

2005 Basin Modeling Results
Excerpt from the Executive Summary (Fugro, 2005)

The groundwater flow model was applied to simulate potential impacts to groundwater levels resulting from projected build-out conditions in the basin. With a projected basin pumpage of 108,300 AFY at build-out (without the importation of any supplemental water), groundwater storage would decline at a rate of approximately 3,800 acre-feet per year. Because of the concentration of pumping sources along Highway 46 east of Paso Robles, the localized pumping depressions developed over the past several years would be manifested by continued lowering of water levels.

Implementation of the Nacimiento water project would reduce the potential adverse impacts of build-out identified in the full build-out scenario. A direct in lieu exchange of Nacimiento water for a portion of the municipal pumpage would result in a general improvement of water levels relative to the projected build-out conditions. The water levels would not decline as much as would be the case without the water project; however, the currently contracted volume of Nacimiento water does not make up the entire deficit between build-out pumpage and perennial yield. With projected basin pumpage of 102,100 AFY at build-out (with importation of 6,250 AFY of Nacimiento water by Atascadero, Templeton, and Paso Robles), groundwater storage in the basin would still decline at a rate of approximately 1,200 AFY.

Comparison of the simulations of projected build-out conditions with and without the Nacimiento project indicates a net benefit of the Nacimiento water supply of about 2,600 AFY in the average annual change in groundwater storage. The benefits of the Nacimiento water project occur almost entirely along the Salinas River corridor.

2010 Water Balance Update
Fugro, 2010. Page 16, last bullet.

In the projected water balances from 2010 to 2025, offsets of urban groundwater pumping by supplemental surface water supplies from the Nacimiento Water Project to the City of Paso Robles, Atascadero MWC, and Templeton CSD resulted in beneficial impacts to groundwater storage for the Basin and Subbasin. Offsets of urban groundwater pumping by supplemental surface water supplies of the Nacimiento Water Project from 2010 to 2025 amounted to 66,798 AF [4,453 AFY on average] in the Basin and 43,298 AF [2,887 AFY on average] in the Subbasin.

Table 16 from the report is also provided for reference. This table reflects the projected urban demands for water for 2010 – 2025.

2011 Resource Capacity Study

The urban demand from the 2010 Water Balance Update was used to develop the water balance estimates provided in the 2011 Resource Capacity Study (RCS). Accounting for this urban demand and a range of growth estimates in rural and agricultural demands per Attachment 5 and 8 of the RCS, the projected outflow in 2025 ranges from 98,313 AFY to 120,070 AFY.

Table 16. Projected Urban Groundwater Pumping and Nacimiento Water Project Deliveries from 2010 to 2025

Water Year	City of Paso Robles			Atascadero MWC			Templeton CSD			San Miguel CSD		
	Groundwater Pumping (acre-feet)	Nacimiento Project Water (acre-feet)	Total Water Demand (acre-feet)	Groundwater Pumping (acre-feet)	Nacimiento Project Water (acre-feet)	Total Water Demand (acre-feet)	Groundwater Pumping (acre-feet)	Nacimiento Project Water (acre-feet)	Total Water Demand (acre-feet)	Groundwater Pumping (acre-feet)	Nacimiento Project Water (acre-feet)	Total Water Demand (acre-feet)
2010	7,299	0	7,299	5,557	2,000	7,557	1,467	250	1,717	398	0	398
2011	6,496	1,000	7,496	5,567	2,000	7,567	1,491	250	1,741	416	0	416
2012	5,571	2,000	7,571	7,075	500	7,575	1,524	250	1,774	435	0	435
2013	5,723	2,000	7,723	5,944	1,639	7,583	1,558	250	1,808	454	0	454
2014	5,955	2,000	7,955	7,091	498	7,589	1,624	250	1,874	472	0	472
2015	6,193	2,000	8,193	6,765	828	7,593	1,657	250	1,907	491	0	491
2016	6,439	2,000	8,439	7,427	170	7,597	1,690	250	1,940	509	0	509
2017	4,692	4,000	8,692	6,559	1,040	7,599	1,724	250	1,974	528	0	528
2018	4,953	4,000	8,953	5,604	1,996	7,600	1,757	250	2,007	547	0	547
2019	5,221	4,000	9,221	7,276	324	7,600	1,797	250	2,047	565	0	565
2020	5,498	4,000	9,498	6,623	975	7,598	1,823	250	2,073	584	0	584
2021	5,783	4,000	9,783	6,988	607	7,595	1,856	250	2,106	603	0	603
2022	6,077	4,000	10,077	7,112	479	7,591	1,890	250	2,140	621	0	621
2023	6,379	4,000	10,379	6,980	605	7,585	1,923	250	2,173	640	0	640
2024	6,690	4,000	10,690	5,940	1,639	7,579	1,956	250	2,206	658	0	658
2025	7,011	4,000	11,011	7,073	498	7,571	1,989	250	2,239	677	0	677